

DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
130 Water Street
Boston, Massachusetts 02109

Attorney's Docket No. _____

Page 1 of 5

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed at 201) below or an original, first and joint inventor (if plural names are listed at 201-208 below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SHIFT REGISTER AND IMAGE DISPLAY DEVICE

which is described and claimed in:

- the specification attached hereto.

the specification in U.S. Application Serial Number _____, filed on _____.

the specification in PCT international application Number _____,
filed on _____; and was amended on _____.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose material information as defined in 37 CFR §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Prior U.S. Applications or PCT International Applications Designating the U.S-Benefit Under 35 U.S.C. §120				
U.S. Applications			Status (Check One)	
Application Serial No.	U.S. Filing Date		Patented	Pending
PCT Applications Designating the U.S.				
Application No.	Filing Date	U.S. Serial No. Assigned		

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)
(35 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

Applicant	Provisional Application Number	Filing Date

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) with full powers of association, substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Sewall P. Bronstein (Reg. No. 16,919)
David G. Conlin (Reg. No. 27,026)
George W. Neuner (Reg. No. 26,964)
Ernest V. Linek (Reg. No. 29,822)

Linda M. Buckley (Reg. No. 31,003)
Ronald I. Eisenstein (Reg. No. 30,628)
Henry D. Pahl, Jr. (Reg. No. 20,438)
Peter J. Manus (Reg. No. 26,766)

David S. Resnick (Reg. No. 34,235)
Peter F. Corless (Reg. No. 33,860)

SEND CORRESPONDENCE TO:		DIRECT TELEPHONE CALLS TO:	
Dike, Bronstein, Roberts & Cushman, LLP 130 Water Street Boston, Massachusetts 02109		(617) 523-3400	

2	FULL NAME OF INVENTOR	LAST NAME Washio	FIRST NAME Hajime	MIDDLE NAME
0	RESIDENCE & CITIZENSHIP	CITY Tenri-shi	STATE OR FOREIGN COUNTRY Nara Japan	COUNTRY OF CITIZENSHIP Japan
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2	FULL NAME OF INVENTOR	LAST NAME Kubota	FIRST NAME Yasushi	MIDDLE NAME
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2	FULL NAME OF INVENTOR	LAST NAME Maeda	FIRST NAME Kazuhiro	MIDDLE NAME
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3	POST OFFICE ADDRESS	2613-1-754, Ichinomoto-cho	CITY Tenri-shi	STATE OR COUNTRY AND ZIP CODE Nara 632-0004 Japan

2	FULL NAME OF INVENTOR	LAST NAME Kaise	FIRST NAME Yasuyoshi	MIDDLE NAME
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2 0 5	FULL NAME OF INVENTOR	LAST NAME Brownlow	FIRST NAME Michael	MIDDLE NAME James
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2 0 6	FULL NAME OF INVENTOR	LAST NAME Cairns	FIRST NAME Graham	MIDDLE NAME Andrew
	RESIDENCE & CITIZENSHIP	CITY Oxford	STATE OR FOREIGN COUNTRY Oxford, United Kingdom	COUNTRY OF CITIZENSHIP United Kingdom
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2 0 7	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

2 0 8	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY AND ZIP CODE

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of Inventor 201 <i>Hayime Wastuo</i> Date: October 5, 2000	Signature of Inventor 202 <i>Yasushi Kubota</i> Date: October 5, 2000
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Signature of Inventor 203 <u>Kazuhiko Maeda</u>	Signature of Inventor 204 <u>Tanayoshi Kaise</u>
Date: October 5, 2000	Date: October 5, 2000
Signature of Inventor 205 <u>J. Brown Jr.</u>	Signature of Inventor 206 <u>Graham Clegg</u>
Date: October 12, 2000	Date: October 12, 2000
Signature of Inventor 207	Signature of Inventor 208
Date:	Date:

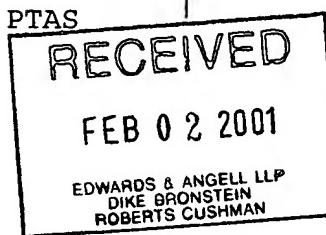
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UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

JANUARY 28, 2001

EDWARDS & ANGELL, LLP
DAVID G. CONLIN
130 WATER STREET
BOSTON, MA 02109



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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/01/2000

REEL/FRAME: 011265/0063
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:	DOC DATE: 10/05/2000
WASHIO, HAJIME	
ASSIGNEE:	DOC DATE: 10/05/2000
KUBOTA, YASUSHI	
ASSIGNEE:	DOC DATE: 10/05/2000
MAEDA, KAZUHIRO	
ASSIGNEE:	DOC DATE: 10/05/2000
KAISE, YASUYOSHI	
ASSIGNEE:	DOC DATE: 10/12/2000
BROWNLOW, MICHAEL JAMES	
ASSIGNEE:	DOC DATE: 10/12/2000
CAIRNS, GRAHAM ANDREW	

011265/0063 PAGE 2

ASSIGNEE:

SHARP KABUSHIKI KAISHA
22-22 NAGAIKE-CHO
ABENO-KU
OSAKA, JAPAN

SERIAL NUMBER: 09703918
PATENT NUMBER:

FILING DATE: 11/01/2000
ISSUE DATE:

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

11-27-2000

t No.: 55368(904)

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office



Tab settings ➤ ➤ ➤ ➤ ➤

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

HAJIME WASHIO, YASUSHI KUBOTA,
KAZUHIRO MAEDA, YASUYOSHI KAISE,
MICHAEL JAMES BROWNLOW
GRAHAM ANDREW CAIRNS

MIC
11/01/00

Yes No

3. Nature of conveyance:

- Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: 10/5/00, 10/5/00, 10/5/00, 10/5/00,
10/12/00 & 10/12/00 respectively

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is: 10/5/00, 10/5/00
10/12/00 & 10/12/00 respectively

Patent Application No. Filing date

11/06/2000 KZEW DIE 00000037 09703918

03 FC:581

40.00 OP

09/703918

Additional numbers

Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: David G. Conlin

Registration No. 27026

Address: Dike, Bronstein, Roberts & Cushman,

Intellectual Property Practice Group

EDWARDS & ANGELL, LLP, 130 Water Street

City: Boston State/Prov.: MA

Country: USA ZIP: 02109

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41): \$ 40.00

- Enclosed - Any excess or insufficiency should be credited or debited to deposit account
 Authorized to be charged to deposit account

8. Deposit account number:

04-1105

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David G. Conlin (Reg. No. 27026)

Name of Person Signing

Signature

November 1, 2000

3

Date

Total number of pages including cover sheet, attachments, and

A S S I G N M E N T

We Hajime WASHIO
Yasushi KUBOTA
and Kazuhiro MAEDA
for good and valuable consideration from SHARP KABUSHIKI KAISHA,
a Japanese corporation,
having its principal place of business in Osaka, Japan
hereinafter called the Assignee, receipt of which is hereby acknowledged, do hereby
sell, assign and transfer unto the Assignee, its successors and assigns, the entire
right, title and interest in, to and under an application for Letters Patent of the
United States Serial No. filed on * signed by us
for Improvements in SHIFT REGISTER AND IMAGE DISPLAY DEVICE

including all priority rights ensuing therefrom, and the inventions and any of them
therin set forth and described, and any and all Letters Patent of the United States
and of countries foreign thereto which may be granted thereon or therefor, together
with the right to apply for such Letters Patent.

And for the above consideration we agree promptly upon request of the Assignee,
its successors or assigns, to execute and deliver without further compensation any
power of attorney, assignment, application, whether original, divisional, continuation
or reissue, or other papers which may be necessary or desirable fully to secure to the
Assignee, its successors and assigns, the inventions and any of them described in said
application and all patent rights therein, in the United States and in any country
foreign thereto.

The undersigned hereby grant(s) the law firm of Dike, Bronstein, Roberts &
Cushman the power to insert on this Assignment any further identification
which may be necessary or desirable in order to comply with the rules of the
U.S. Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, I, Hajime WASHIO, hereunto set my
hand and seal this 5th day of October, 2000, I, Yasushi
KUBOTA, hereunto set my hand and seal this 5th day of October
2000, and I, Kazuhiro MAEDA, hereunto set my hand and seal
this 5th day of October, 2000.

Hajime Washio
Yasushi Kubota
Kazuhiro Maeda

Commonwealth [State] of _____ ss.
County of _____ ss.

Before me this _____ day of _____, 19_____, personally appeared
_____, who is to me personally known, and acknowledged
the foregoing instrument of assignment to be [her] his free act and deed.

Notary Public

Commonwealth [State] of _____ ss.
County of _____ ss.

Before me this _____ day of _____, 19_____, personally appeared
_____, who is to me personally known, and acknowledged
the foregoing instrument of assignment to be [her] his free act and deed.

Notary Public

*Where the application is assigned before it is filed,
and hence has no Serial No., this shall be left blank.

A S S I G N M E N T

We Yasuyoshi KAISE
Michael James BROWNLOW
and Graham Andrew CAIRNS
for good and valuable consideration from SHARP KABUSHIKI KAISHA,
having its principal place of business in Osaka, Japan,
hereinafter called the Assignee, receipt of which is hereby acknowledged, do hereby
sell, assign and transfer unto the Assignee, its successors and assigns, the entire
right, title and interest in, to and under an application for Letters Patent of the
United States Serial No. _____, filed on _____ * signed by us
for Improvements in SHIFT REGISTER AND IMAGE DISPLAY DEVICE

including all priority rights ensuing therefrom, and the inventions and any of them
therein set forth and described, and any and all Letters Patent of the United States
and of countries foreign thereto which may be granted thereon or therefor, together
with the right to apply for such Letters Patent.

And for the above consideration we agree promptly upon request of the Assignee,
its successors or assigns, to execute and deliver without further compensation any
power of attorney, assignment, application, whether original, divisional, continuation
or reissue, or other papers which may be necessary or desirable fully to secure to the
Assignee, its successors and assigns, the inventions and any of them described in said
application and all patent rights therein, in the United States and in any country
foreign thereto.

The undersigned hereby grant(s) the law firm of Dike, Bronstein, Roberts &
Cushman the power to insert on this Assignment any further identification
which may be necessary or desirable in order to comply with the rules of the
U.S. Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, I, Yasuyoshi KAISE, hereunto set my
hand and seal this 5th day of October, 2000, I, Michael James
BROWNLOW, hereunto set my hand and seal this 12th day of October
2000, and I, Graham Andrew CAIRNS, hereunto set my hand and seal
this 12th day of October, 2000.

Yasuyoshi Kaise
Michael Brownlow
Graham Cairns

Commonwealth [State] of _____ ss.
County of _____ ss.

Before me this _____ day of _____, 19_____, personally appeared
_____, who is to me personally known, and acknowledged
the foregoing instrument of assignment to be [her] his free act and deed.

Notary Public

Commonwealth [State] of _____ ss.
County of _____ ss.

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_____, who is to me personally known, and acknowledged
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